



TUAV Radar Enables FCS Success



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Tactical UAV SAR/MTI Radar



Ku Band
65 lbs.
530 W

Receiver/Transmitter

Fans

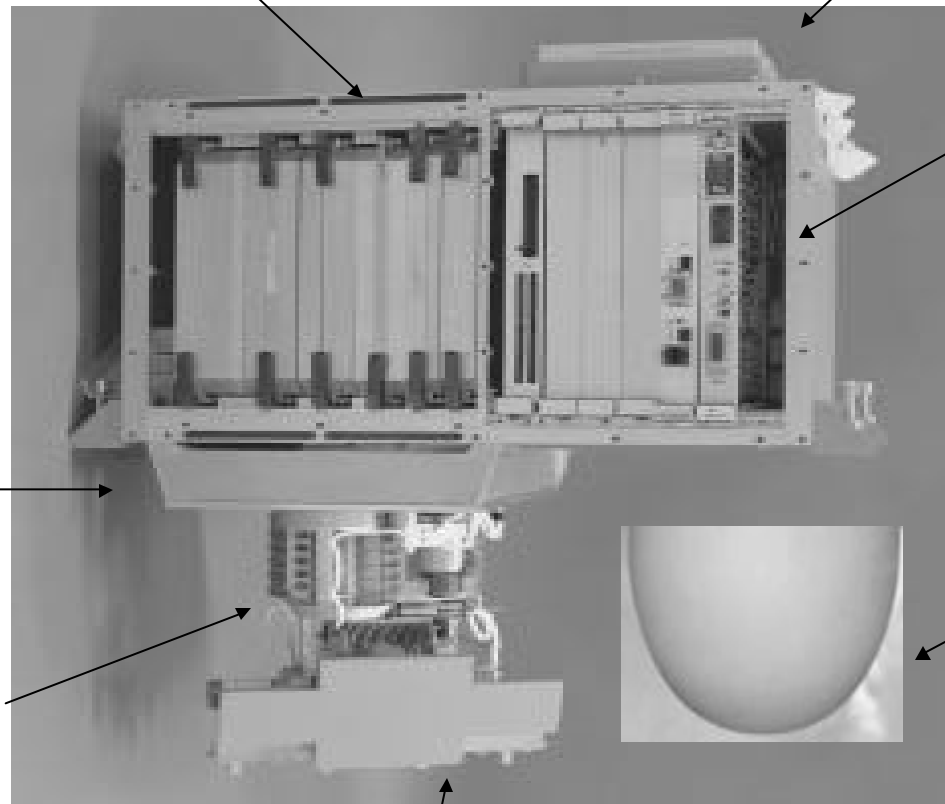
Processor

Gimbal
Electronics

Gimbal

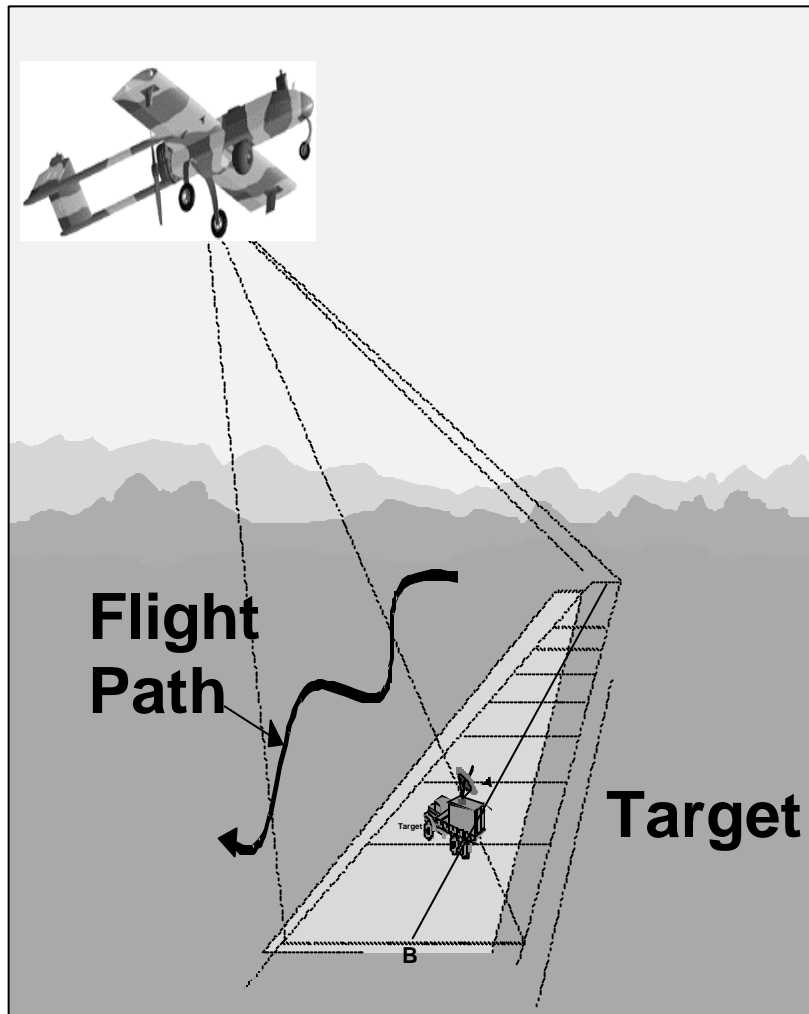
Radome

Antenna Array





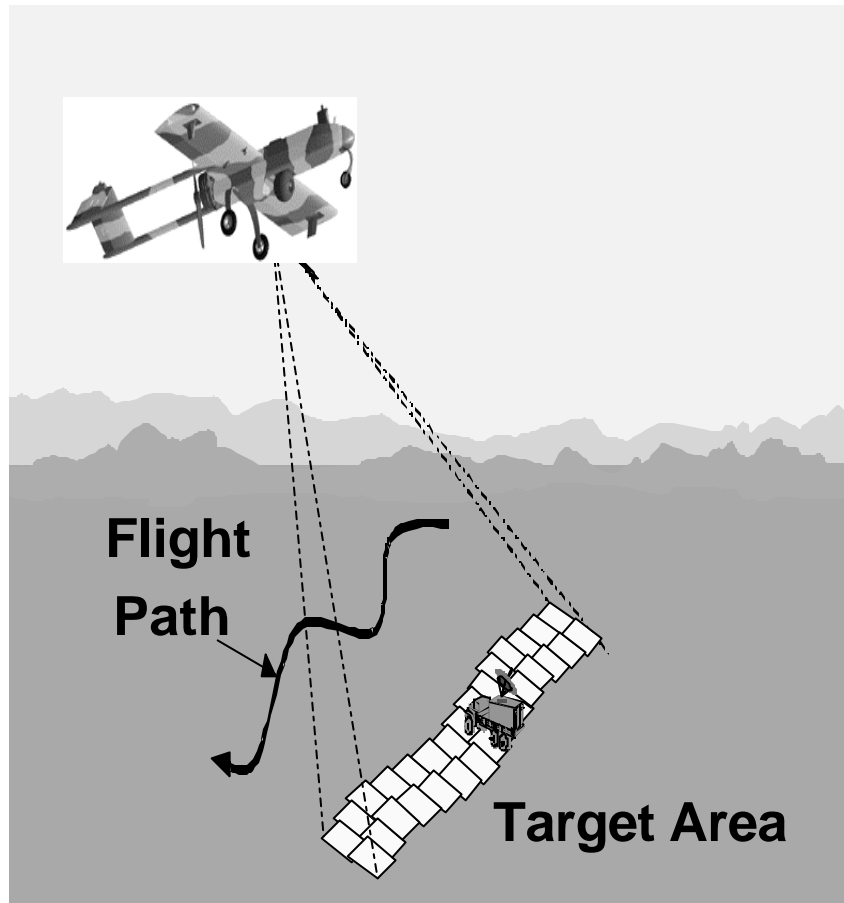
SAR Strip Map Mode 2



- **Swath Width - 400 to 1200M**
- **Variable Resolution - 0.3 - 1.0 meter**
- **3 Ft Res Search, Image Target at 1 Ft**
- **CEP - 23 to 28M**
- **Range to 12 km**
- **Map Way Point to Way Point**



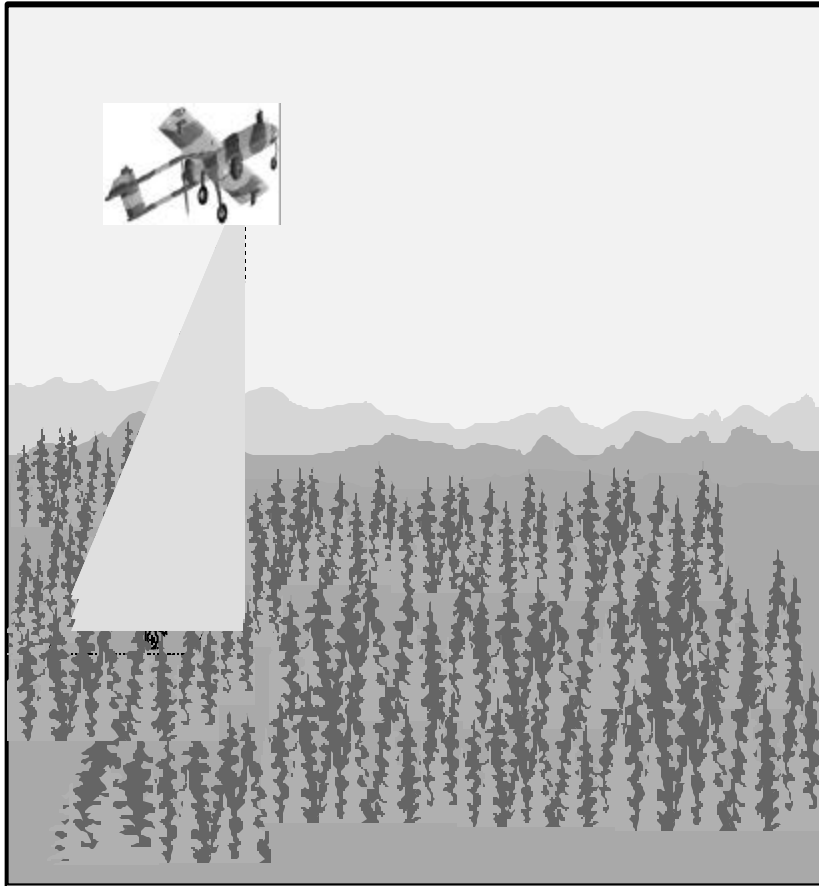
SAR Strip Map Mode 1



- **Swath Width - 400 to 1200M**
- **Variable Resolution - 0.3 - 1.0 meter**
- **3 Ft Res Search, Image Target at 1 Ft**
- **CEP - 23 to 28M**
- **Range to 12 km**
- **Fixed Depression**



Spot-Light Mode



- **Multiple Images
at Multiple Angles**
- **Spot Size**
400x400m(1 Ft Res)
1200x1200m (3Ft Res)
- **CEP - 23 to 28M**
- **Range - to 12km**

**Versatile Organic RSTA Capability
for FCS Commander**



SAR 1.0m Resolution Imagery





SAR 0.3m Resolution Imagery

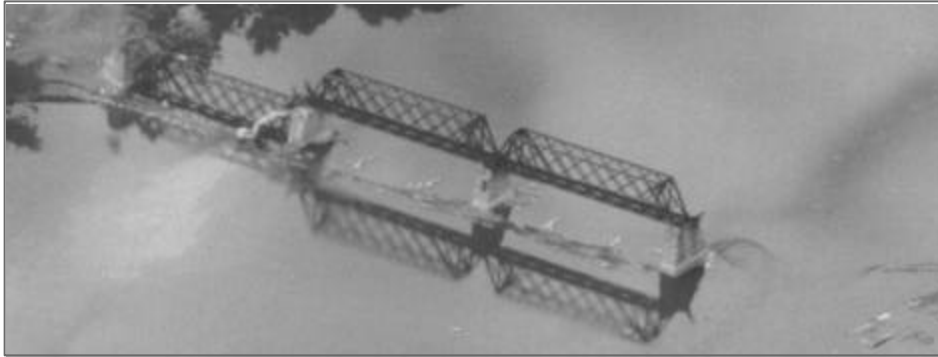




SAR Overcomes Environmental Conditions

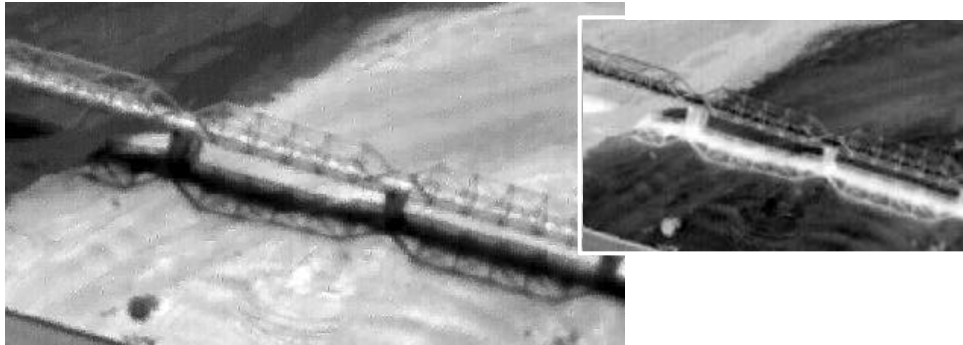


EO



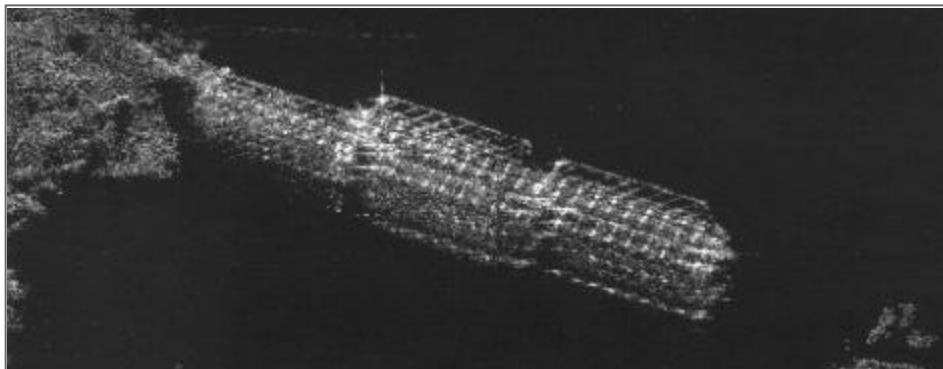
**Clear Sky,
Daylight**

IR



**Clear Sky,
Day or Night,
Below Clouds**

SAR



**Clear /Adverse
Conditions
Day or Night,
Through Clouds**



Conclusions

- Active Sensors provide Continuous ISR in Adverse Atmospheric Conditions
- Extends Engagement Horizon beyond Enemy's Range
- Provides Real-time ISR&T Directly to Field Commanders
- Multi-Mode Sensors Reduce Force Structure and Logistics Trail
- Permits Continuous BDA Throughout an Engagement